RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/805,650_

Source: _1 FWO_

Date Processed by STIC: _11/12/04_

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RAW SEQUENCE LISTING   DATE: 11/12/2004
PATENT APPLICATION: **US/10/805,650**   TIME: 14:05:38

     Input Set : **A:\Sequence Listing 25436-2382.ST25.txt**
     Output Set: **N:\CRF4\11122004\J805650.raw**

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 3 <110> APPLICANT: Borns, Michael
 5 <120> TITLE OF INVENTION: DNA Polymerase Fusions and Uses Thereof
 7 <130> FILE REFERENCE: 25436/2382
 9 <140> CURRENT APPLICATION NUMBER: US 10/805,650
10 <141> CURRENT FILING DATE: 2004-03-19
12 <150> PRIOR APPLICATION NUMBER: US 60/457,426
13 <151> PRIOR FILING DATE: 2003-03-25
15 <160> NUMBER OF SEQ ID NOS: 148
17 <170> SOFTWARE: PatentIn version 3.1
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 30
21 <212> TYPE: DNA
22 <213> ORGANISM: Artificial sequence
24 <220> FEATURE:
25 <223> OTHER INFORMATION: primer
27 <400> SEQUENCE: 1
28 gacgacgaca agatgatttt agatgtggat                              30
31 <210> SEQ ID NO: 2
32 <211> LENGTH: 30
33 <212> TYPE: DNA
34 <213> ORGANISM: Artificial sequence
36 <220> FEATURE:
37 <223> OTHER INFORMATION: primer
39 <400> SEQUENCE: 2
40 ggaacaagac ccgtctagga ttttttaatg                             30
43 <210> SEQ ID NO: 3
44 <211> LENGTH: 30
45 <212> TYPE: DNA
46 <213> ORGANISM: Artificial sequence
48 <220> FEATURE:
49 <223> OTHER INFORMATION: primer
51 <400> SEQUENCE: 3
52 agagcttgag gagagcagga aaggtggaac                             30
55 <210> SEQ ID NO: 4
56 <211> LENGTH: 30
57 <212> TYPE: DNA
58 <213> ORGANISM: Artificial sequence
60 <220> FEATURE:
61 <223> OTHER INFORMATION: primer
63 <400> SEQUENCE: 4
64 gggaggggag gtacagggtt gaggctagtg                             30
67 <210> SEQ ID NO: 5
68 <211> LENGTH: 37
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 69 <212> TYPE: DNA
 70 <213> ORGANISM: Artificial sequence
 72 <220> FEATURE:
 73 <223> OTHER INFORMATION: primer
 75 <400> SEQUENCE: 5
 76 gaacatcccc aagatgaacc cactattaga gaaaaag                              37
 79 <210> SEQ ID NO: 6
 80 <211> LENGTH: 37
 81 <212> TYPE: DNA
 82 <213> ORGANISM: Artificial sequence
 84 <220> FEATURE:
 85 <223> OTHER INFORMATION: primer
 87 <400> SEQUENCE: 6
 88 cttttttctct aatagtgggt tcatcttggg gatgttc                             37
 91 <210> SEQ ID NO: 7
 92 <211> LENGTH: 37
 93 <212> TYPE: DNA
 94 <213> ORGANISM: Artificial sequence
 96 <220> FEATURE:
 97 <223> OTHER INFORMATION: primer
 99 <400> SEQUENCE: 7
100 gaacatcccc aagatagacc cactattaga gaaaaag                              37
103 <210> SEQ ID NO: 8
104 <211> LENGTH: 37
105 <212> TYPE: DNA
106 <213> ORGANISM: Artificial sequence
108 <220> FEATURE:
109 <223> OTHER INFORMATION: primer
111 <400> SEQUENCE: 8
112 cttttttctct aatagtgggt ctatcttggg gatgttc                             37
115 <210> SEQ ID NO: 9
116 <211> LENGTH: 37
117 <212> TYPE: DNA
118 <213> ORGANISM: Artificial sequence
120 <220> FEATURE:
121 <223> OTHER INFORMATION: primer
123 <400> SEQUENCE: 9
124 gaacatcccc aagataaccc cactattaga gaaaaag                              37
127 <210> SEQ ID NO: 10
128 <211> LENGTH: 37
129 <212> TYPE: DNA
130 <213> ORGANISM: Artificial sequence
132 <220> FEATURE:
133 <223> OTHER INFORMATION: primer
135 <400> SEQUENCE: 10
136 cttttttctct aatagtgggg ttatcttggg gatgttc                             37
139 <210> SEQ ID NO: 11
140 <211> LENGTH: 37
141 <212> TYPE: DNA
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PATENT APPLICATION: US/10/805,650   TIME: 14:05:38

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142 <213> ORGANISM: Artificial sequence
144 <220> FEATURE:
145 <223> OTHER INFORMATION: primer
147 <400> SEQUENCE: 11
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151 <210> SEQ ID NO: 12
152 <211> LENGTH: 37
153 <212> TYPE: DNA
154 <213> ORGANISM: Artificial sequence
156 <220> FEATURE:
157 <223> OTHER INFORMATION: primer
159 <400> SEQUENCE: 12
160 ctttttctct aatagtgggg tgatcttggg gatgttc                    37
163 <210> SEQ ID NO: 13
164 <211> LENGTH: 37
165 <212> TYPE: DNA
166 <213> ORGANISM: Artificial sequence
168 <220> FEATURE:
169 <223> OTHER INFORMATION: primer
171 <220> FEATURE:
172 <221> NAME/KEY: misc_feature
173 <222> LOCATION: (1)..(1)
174 <223> OTHER INFORMATION: 5'-phosphate
177 <220> FEATURE:
178 <221> NAME/KEY: misc_feature
179 <222> LOCATION: (16)..(18)
180 <223> OTHER INFORMATION: NNK where N=any nucleotide
183 <400> SEQUENCE: 13
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W--> **184 gaacatcccc aagatnnkcc cactattaga gaaaaag   37**
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188 <211> LENGTH: 31
189 <212> TYPE: DNA
190 <213> ORGANISM: Artificial sequence
192 <220> FEATURE:
193 <223> OTHER INFORMATION: primer
195 <400> SEQUENCE: 14
196 gaacatcccc aagataaacc cactattaga g                          31
199 <210> SEQ ID NO: 15
200 <211> LENGTH: 31
201 <212> TYPE: DNA
202 <213> ORGANISM: Artificial sequence
204 <220> FEATURE:
205 <223> OTHER INFORMATION: primer
207 <400> SEQUENCE: 15
208 ctctaatagt gggtttatct tggggatgtt c                          31
211 <210> SEQ ID NO: 16
212 <211> LENGTH: 37
213 <212> TYPE: DNA
214 <213> ORGANISM: Artificial sequence
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216 <220> FEATURE:
217 <223> OTHER INFORMATION: primer
219 <220> FEATURE:
220 <221> NAME/KEY: misc_feature
221 <222> LOCATION: (1)..(1)
222 <223> OTHER INFORMATION: 5'-phosphate
225 <400> SEQUENCE: 16
226 gaacatcccc aagatgcacc cactattaga gaaaaag                    37
229 <210> SEQ ID NO: 17
230 <211> LENGTH: 37
231 <212> TYPE: DNA
232 <213> ORGANISM: Artificial sequence
234 <220> FEATURE:
235 <223> OTHER INFORMATION: primer
237 <220> FEATURE:
238 <221> NAME/KEY: misc_feature
239 <222> LOCATION: (1)..(1)
240 <223> OTHER INFORMATION: 5'-phosphate
243 <400> SEQUENCE: 17
244 gaacatcccc aagatgaccc cactattaga gaaaaag                    37
247 <210> SEQ ID NO: 18
248 <211> LENGTH: 38
249 <212> TYPE: DNA
250 <213> ORGANISM: Artificial sequence
252 <220> FEATURE:
253 <223> OTHER INFORMATION: primer
255 <220> FEATURE:
256 <221> NAME/KEY: misc_feature
257 <222> LOCATION: (1)..(1)
258 <223> OTHER INFORMATION: 5'-phosphate
261 <400> SEQUENCE: 18
262 gaacatcccc aagattgccc ccactattag agaaaaag                   38
265 <210> SEQ ID NO: 19
266 <211> LENGTH: 37
267 <212> TYPE: DNA
268 <213> ORGANISM: Artificial sequence
270 <220> FEATURE:
271 <223> OTHER INFORMATION: primer
273 <220> FEATURE:
274 <221> NAME/KEY: misc_feature
275 <222> LOCATION: (1)..(1)
276 <223> OTHER INFORMATION: 5'-phosphate
279 <400> SEQUENCE: 19
280 gaacatcccc aagatatacc cactattaga gaaaaag                    37
283 <210> SEQ ID NO: 20
284 <211> LENGTH: 37
285 <212> TYPE: DNA
286 <213> ORGANISM: Artificial sequence
288 <220> FEATURE:
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```
289 <223> OTHER INFORMATION: primer
291 <220> FEATURE:
292 <221> NAME/KEY: misc_feature
293 <222> LOCATION: (1)..(1)
294 <223> OTHER INFORMATION: 5'-phosphate
297 <400> SEQUENCE: 20
298 gaacatcccc aagatatgcc cactattaga gaaaaag                    37
301 <210> SEQ ID NO: 21
302 <211> LENGTH: 37
303 <212> TYPE: DNA
304 <213> ORGANISM: Artificial sequence
306 <220> FEATURE:
307 <223> OTHER INFORMATION: primer
309 <220> FEATURE:
310 <221> NAME/KEY: misc_feature
311 <222> LOCATION: (1)..(1)
312 <223> OTHER INFORMATION: 5'-phosphate
315 <400> SEQUENCE: 21
316 gaacatcccc aagatttccc cactattaga gaaaaag                    37
319 <210> SEQ ID NO: 22
320 <211> LENGTH: 37
321 <212> TYPE: DNA
322 <213> ORGANISM: Artificial sequence
324 <220> FEATURE:
325 <223> OTHER INFORMATION: primer
327 <220> FEATURE:
328 <221> NAME/KEY: misc_feature
329 <222> LOCATION: (1)..(1)
330 <223> OTHER INFORMATION: 5'-phosphate
333 <400> SEQUENCE: 22
334 gaacatcccc aagatcctcc cactattaga gaaaaag                    37
337 <210> SEQ ID NO: 23
338 <211> LENGTH: 37
339 <212> TYPE: DNA
340 <213> ORGANISM: Artificial sequence
342 <220> FEATURE:
343 <223> OTHER INFORMATION: primer
345 <220> FEATURE:
346 <221> NAME/KEY: misc_feature
347 <222> LOCATION: (1)..(1)
348 <223> OTHER INFORMATION: 5'-phosphate
351 <400> SEQUENCE: 23
352 gaacatcccc aagatagccc cactattaga gaaaaag                    37
355 <210> SEQ ID NO: 24
356 <211> LENGTH: 37
357 <212> TYPE: DNA
358 <213> ORGANISM: Artificial sequence
360 <220> FEATURE:
361 <223> OTHER INFORMATION: primer
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 11/12/2004
PATENT APPLICATION: US/10/805,650   TIME: 14:05:39

Input Set : A:\Sequence Listing 25436-2382.ST25.txt
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Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:13; N Pos. 16,17
Seq#:27; N Pos. 277,278,279
Seq#:28; N Pos. 277,278,279
Seq#:29; N Pos. 277,278,279,1161
Seq#:30; N Pos. 277,278,279,1161
Seq#:31; N Pos. 277,278,279,423,429
Seq#:32; N Pos. 277,278,279,423,429
Seq#:33; N Pos. 277,278,279
Seq#:34; N Pos. 277,278,279
Seq#:35; N Pos. 277,278,279
Seq#:36; N Pos. 277,278,279
Seq#:37; N Pos. 277,278,279
Seq#:38; N Pos. 277,278,279
Seq#:39; N Pos. 277,278,279
Seq#:40; N Pos. 277,278,279
Seq#:57; N Pos. 277,278,279
Seq#:57; Xaa Pos. 93
Seq#:58; Xaa Pos. 93
Seq#:59; N Pos. 277,278,279
Seq#:59; Xaa Pos. 93
Seq#:60; Xaa Pos. 93
Seq#:61; N Pos. 2788,2789,3287,3288,3289,3290,3291,3292,3473,3478

VERIFICATION SUMMARY   DATE: 11/12/2004
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```
L:184 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:430 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:240
L:521 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:240
L:619 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:240
M:341 Repeated in SeqNo=29
L:716 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:240
M:341 Repeated in SeqNo=30
L:820 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:240
M:341 Repeated in SeqNo=31
L:923 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:240
M:341 Repeated in SeqNo=32
L:1015 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:240
L:1106 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:240
L:1198 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:240
L:1289 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:240
L:1381 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:240
L:1472 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:240
L:1564 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:240
L:1655 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:240
L:4990 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:57,Line#:4988
L:5011 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:240
M:341 Repeated in SeqNo=57
L:5222 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58 after pos.:80
L:5414 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:59,Line#:5406
L:5435 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59 after pos.:240
M:341 Repeated in SeqNo=59
L:5646 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:80
L:5838 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:61,Line#:5836
L:6051 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:2771
M:341 Repeated in SeqNo=61
L:6291 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:63,Line#:6289
L:6350 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:65,Line#:6348
L:6801 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:67,Line#:6799
L:6948 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:69,Line#:6946
L:7007 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:71,Line#:7005
L:7712 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:120,Line#:7710
L:7769 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:122,Line#:7767
L:8114 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:124,Line#:8112
L:8603 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:126,Line#:8601
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